

ANTIMICROBAL RESISTANCE

The Johannesburg and Cape Town Antimicrobial Resistance Reference Laboratories (AMRRL) of the Centre for Opportunistic, Tropical and Hospital Infections (COTHI) at NICD/NHLS test referred isolates of suspected carbapenemase-producing Enterobacteriaceae (CPE) for the presence of selected carbapenemase genes. For April 2014, a total of 49 Enterobacteriaceae isolates were screened, 47% (23/49) of which were confirmed as CPE. The most commonly referred isolates were *Klebsiella pneumoniae* (25/49, 51%) followed by *Enterobacter cloacae* (13/49, 27%) (Figure 1).

Ten NDM-positive isolates were identified (six from private hospitals in KwaZulu-Natal Province and four from public hospitals in Gauteng Province). Twelve OXA-48 positive isolates were identified (five from private hospitals in Gauteng Province, five from public hospitals in Eastern Cape Province, and one each from public hospitals in Western Cape and Gauteng Provinces). One VIM-positive isolate from the public sector in Gauteng Province was identified (Figure 2).

It is important to note that these figures do not represent the current burden of CPEs in South Africa. CPE infections are currently not reportable or notifiable in South Africa, and this report does not represent

surveillance and consequently no locally representative data is available, except those based on referral isolates. This is of major concern, since meaningful data can inform public health policy and highlight priorities for action. Controlling the spread and limiting the impact of CPEs in South Africa will require intensive efforts in both the public and private healthcare sectors going forward. NHLS and private laboratories are encouraged to submit suspected CPE isolates based on antimicrobial susceptibility testing (AST) criteria to the AMRRL, NICD/NHLS. Please telephone (011) 555 0342/44 or email ashikas@nicd.ac.za and olgap@nicd.ac.za; for queries or further information. In the Western Cape area, please email colleen.bamford@nhls.ac.za.

Source: Source: Centre for Opportunistic, Tropical and Hospital Infection, NICD-NHLS

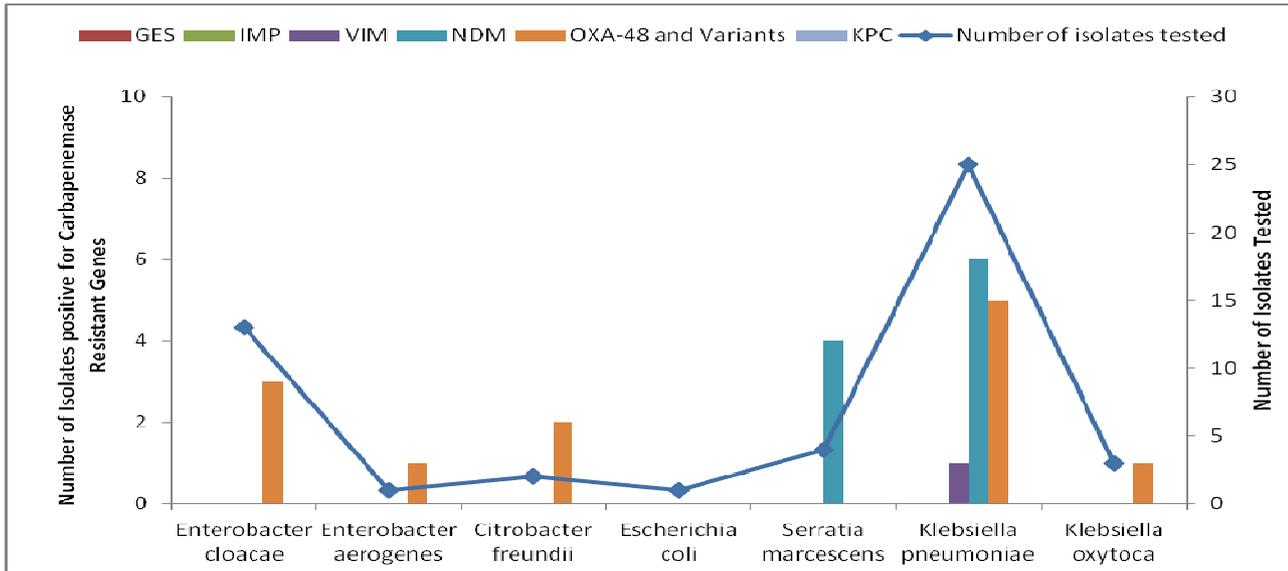


Figure 1. Enterobacteriaceae isolates screened (n=49) and confirmed CPE (n=23) during April

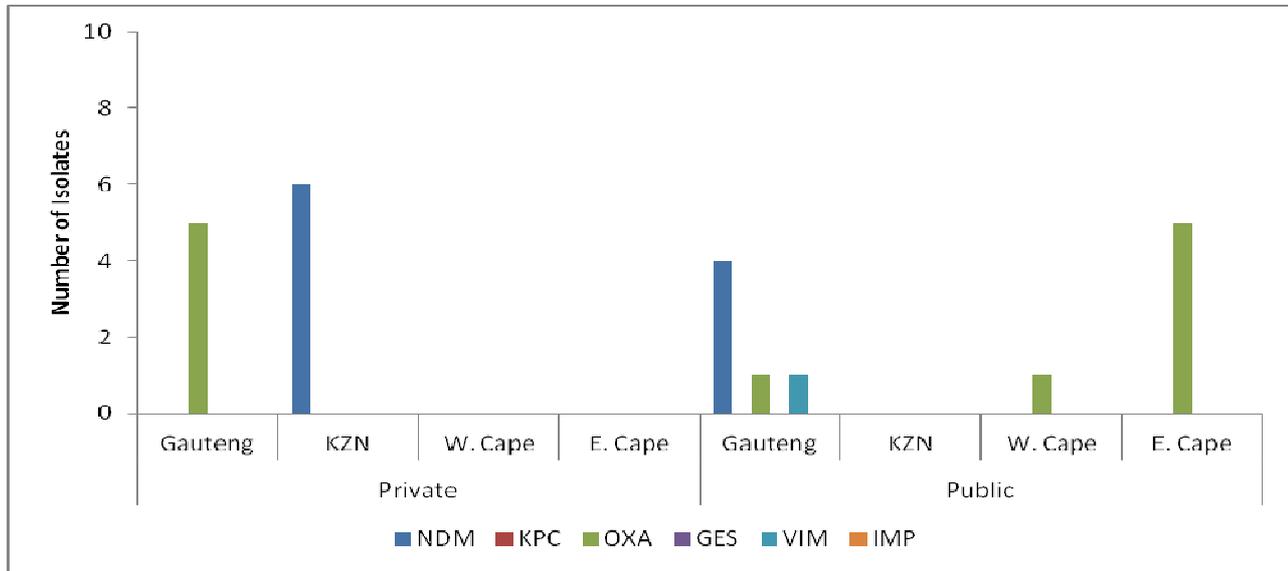


Figure 2. Laboratory-confirmed CPE (n=23) by province and healthcare sector